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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,929	10/10/2001	Richard C. Rose	109039	4843

7590 07/22/2004

S . H .
AT&T CORP
P. O. BOX 4110
MIDDLETOWN, NJ 07748

EXAMINER	
BRANT, DMITRY	

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/972,929	ROSE ET AL.	
	Examiner	Art Unit	
	Dmitry Brant	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/10/01*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Gong (6,418,411).

The U.S. patent of Gong teaches a computer-based speech processing method and therefore Gong's invention necessarily includes the computer system (claims 5-8), carrier wave transmissions (claims 9-12) and computer code necessary to implement such a system (claim 13).

The table below summarizes the claimed limitations of Applicant's invention and parts of Gong's patent that "read on" these limitations.

Claim#	Limitations	Gong
1,5,9,13	A method of dynamic re-configurable speech recognition comprising the steps of: determining parameters of a background	On-line noise compensation (**elems. 19, 20, FIG.**

	model of a received voice request determining parameters of a transducer model determining an adapted speech recognition model for a speech recognition model based on at least one of the background model and the transducer model determining information in the voice request based on the adapted speech recognition model.	1) determines background noise parameters (**Col. 2, lines 35-47**) One-time adaptation (**elem. 12, FIG. 1**) calculates microphone (transducer) characteristics (**Col. 1, lines 59-62**) The system then proceeds to produce an adapted model based on the inputs from on-line noise estimation (background adaptation) and one-time adaptation (transducer adaptation) - (**elem. 20, FIG. 1 and Col.2, lines 44-50**) Steps 4 and 5 - (**Col. 2, lines 58-61**)
2,6,10	The method of claim 1, further comprising the steps of: determining at least one sample period determining at least one of a new background model and a new transducer model based on the at least one sample period.	 Sample period for background noise is determined before speech utterance (see "noise samples" section, **FIG. 2**) Background model is determined based on the samples taking during the sample period (**Col. 2, lines 43-45 and elem. 19, FIG. 1**)
3,7,11	The method of claim 2, wherein, the parameters of the background model are determined based on a first sample period and the parameters of the transducer model are determined based on a second sample period.	Sample period for background noise estimation takes place during "noise samples" section shown in FIG. 2 and during subsequent speech pauses (**Col. 5, lines 29-32**) Sample period for transducer model takes place during one-time adaptation (calibration), which takes place before on-line adaptation and thus inherently requires a second, distinct sampling

		period (**Col. 5, lines 23-28**)
4,8,12	The method of claim 2, further comprising the steps of: saving at least one of the parameters of the background model and the parameters of the transducer model determining the adapted speech recognition model based on the at least one sample period and at least one of the background model and the transducer model.	Background noise is recorded and estimated (**Col. 2, lines 43-44**) After noise sampling, the system then proceeds to produce an adapted model based on the inputs from on-line noise compensation (**elem. 19, FIG.1**) and one-time adaptation (transducer adaptation) - (**elem. 20, FIG. 1 and Col.2, lines 44-50**)
14	A method of dynamic re-configurable speech recognition comprising the steps of: determining user specific parameters of a background model for a received voice request determining user specific parameters of a transducer model determine an adapted speech recognition model for a speech recognition model based on at least one of the background model and the transducer model determining information in the voice request based on the adapted speech recognition model	On-line noise compensation (**elems. 19, 20, FIG. 1**) determines background noise parameters (**Col. 2, lines 35-47**) One-time adaptation (**elem. 12, FIG. 1**) calculates microphone (transducer) characteristics (**Col. 1, lines 59-62**) The system then proceeds to produce an adapted model based on the inputs from on-line noise estimation (background adaptation) and one-time adaptation (transducer adaptation) - (**elem. 20, FIG. 1 and Col.2, lines 44-50**) Steps 4 and 5 - (**Col. 2, lines 58-61**)

	determining at least one sample period	Sample period for background noise is determined before speech utterance (see "noise samples" section, **FIG. 2**)
	determining at least one of a new background model and a new transducer model based on the at least one sample period	Background model is determined based on the samples taking during the sample period (**Col. 2, lines 43-45 and elem. 19, FIG. 1**)
	wherein, the background model is determined based on a first sample period	Sample period for background noise estimation takes place during "noise samples" section shown in FIG. 2 and during subsequent speech pauses (**Col. 5, lines 29-32**)
	and the transducer model is determined based on a second sample period.	Sample period for transducer model takes place during one-time adaptation (calibration), which takes place before on-line adaptation and thus inherently requires a second, distinct sampling period (**Col. 5, lines 23-28**)

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takagi (5,890,113) teaches environmental adaptation of speaker models

Boies et al. (6,502,070) teach adaptation of speech patterns using channel-specific models.

Huang et al. (6,421,641) teach fast adaptation of band-quantized speech decoding system.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Brant whose telephone number is (703) 305-8954. The examiner can normally be reached on Mon. - Fri. (8:30am - 5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits can be reached on (703) 306-3011. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Tech Center 2600 receptionist whose telephone number is (703) 305- 4700.

DB

7/13/04

W. R. YOUNG
PRIMARY EXAMINER